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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,817	08/30/2005	Tosti Jon Mankelow	37945-0070	7832
26633 7590 06/06/2007 HELLER EHRMAN LLP 1717 RHODE ISLAND AVE, NW			EXAMINER	
			HADDAD, MAHER M	
WASHINGTON, DC 20036-3001			ART UNIT	PAPER NUMBER
			1644	
		•		
		•	MAIL DATE	DELIVERY MODE
			06/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

•	Application No.	Applicant(s)	
0.55'	10/533,817	MANKELOW ET AL.	
Office Action Summary	Examiner	Art Unit	
	Maher M. Haddad	1644	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the o	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE of the state of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period we failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on  2a) This action is FINAL. 2b) This  3) Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final.  nce except for formal matters, pro		
Disposition of Claims			
<ul> <li>4)  Claim(s) 1-24 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdraw</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) 1-24 are subject to restriction and/or expending in the application.</li> </ul>			
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examine 11).	epted or b) objected to by the larawing(s) be held in abeyance. Section is required if the drawing(s) is ob-	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119	•		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Application ity documents have been received in the contraction (PCT Rule 17.2(a)).	on No ed in this National Stage	
Attachment(s)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate	

Application/Control Number: 10/533,817

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## **DETAILED ACTION**

- 1. Applicant's amendment, filed on 5/3/05, is acknowledged.
- 2. Claims 1-24 are pending.

## Election/Restrictions

- 3. Restriction is required under 35 U.S.C. 121 and 372. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.
- 4. In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.
  - I. Claims 1-10 and 12-14, drawn to an epitope for binding integrin comprising strands domain of ICAM-1.
  - II. Claims 11, drawn to an <u>antagonist of the epitope</u> for binding integrin comprising strands domain of ICAM-1.
  - III. Claims 15, drawn to a method of antagonizing the epitope of for binding integrin comprising strands domain of ICAM-1 comprising contacting the epitope with an antagonist of the epitope for binding integrins.
  - IV. Claim 16, drawn to a method of antagonizing a ligand of the epitope for binding integrin comprising strands domain of ICAM-1 comprising the step of contacting the ligand with an antagonist of a ligand of the epitope of binding integrins.
  - V. Claims 17-18 and 20-22, drawn to a method of treating a disease using the <u>antagonist</u> of the epitope for binding integrins.
  - VI. Claim 19, drawn to a method of making a medicament for the treatment of a disease comprising the <u>antagonist of the epitope</u> for binding integrins.
  - VII. Claims 23-24, drawn to an isolated nucleotide encoding the epitope of for binding integrin comprising strands domain of ICAM-1
  - VIII. Claims 23, drawn to an isolated nucleotide encoding an antagonist of epitope of for binding integrin comprising strands domain of ICAM-1

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4. The inventions listed as Groups I-VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

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The invention of Group I was found to have no special technical feature that defined the contribution over the prior art of Hermand et al, (IDS ref) (see entire document).

Hermand et al teach an epitope for binding integrins, comprising ICAM-4 strands A and G of domain 1 of ICAM4, or a functional homologue of the epitope (see Fig. 1). ICAM-2 or the ICAM-4 are considered to be the functional homologue of the epitope. ICAM-4 is missing the 1<sup>st</sup> amino acid of the A strand, Pro.

Since Applicant's inventions do not contribute a special technical feature when viewed over the prior art they do not have a single general inventive concept and so lack unity of invention.

## Species Election

- 5. Irrespective of whichever group applicant may elect, applicant is further required under 35 US 121 (1) to elect a single disclosed species to which claims would be restricted if no generic claim is finally held to be allowable and (2) to list all claims readable thereon including those subsequently added.
  - I. If Group I is elected, applicant is required to elect a single specific strands such as the one recited in claim 13, and 14. These are distinct species because their structures and modes of action are different which, in turn, address different therapeutic endpoints.
  - II. If Group V is elected, applicant is required to elect a single specific disease such as the one recited in claim 22. These species are distinct because the pathological conditions differ in etiologies and therapeutic endpoints; thus each condition represents patentably distinct subject matter.

Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

6. Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

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Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

- 7. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.
- 8. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maher Haddad whose telephone number is (571) 272-0845. The examiner can normally be reached Monday through Friday from 7:30 am to 4:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 24, 2007

Maher Haddad, Ph.D.
Primary Patent Examiner
Technology Center 1600